an amplifier circuit that has a first input terminal and a second input terminal and that amplifies and then outputs a difference between electric signals fed to the first and second input terminals;

a first wire that connects the first electrode to the first input terminal; and

a second wire having substantially an identical length as the first wire and laid substantially parallel thereto, the second wire that connects the second electrode to the second input terminal.

5. (Once Amended) A photosensor-amplifier device as claimed in claim 1,

wherein the photoelectric conversion circuit includes a photodiode built by joining an N-type semiconductor and a P-type semiconductor together,

the first electrode is connected electrically to one end of the photodiode, and the second electrode is electrically open.

6. (Once Amended) A photosensor-amplifier device as claimed in claim 1,

wherein the photoelectric conversion circuit includes a photodiode comprised of joining an N-type semiconductor and a P-type semiconductor together and a diode comprised of joining an N-type semiconductor and a P-type semiconductor together and shielded from light;

the first electrode is connected electrically to one end of the photodiode; and

the second electrode is electrically open.

9. (Once Amended) An infrared communication device incorporating a photosensor-amplifier device,

wherein the photosensor-amplifier device comprises:

a photoelectric conversion circuit that converts an optical signal into an electric signal;

a first electrode connected electrically to the photoelectric conversion circuit and by which the electric signal is extracted from the photoelectric conversion circuit;

a second electrode connected physically to the photoelectric conversion circuit and formed in close proximity to the first electrode;

an amplifier circuit that has a first input terminal and a second input terminal and that amplifies and then outputs a difference between electric signals fed to the first and second input terminals;

a first wire that connects the first electrode to the first input terminal; and

a second wire having substantially an identical length as the first wire and laid substantially parallel thereto, the second wire that connects the second electrode to the second input terminal.

-- 11. (New) A photosensor-amplifier device comprising:

a first chip having a photoelectric conversion circuit that converts an optical signal into an electric signal;

a first electrode formed on the first chip and connected electrically to the photoelectric conversion circuit;

a second electrode formed on the first chip so as to be located in close proximity to the first electrode;

a second chip having an amplifier circuit for amplifying and outputting a difference between electric signals fed thereto;

a first input terminal formed on the second chip and connected electrically to one input portion of the amplifier circuit;

a second input terminal formed on the second chip so as to be located in close proximity to the first input terminal and connected electrically to another input portion of the amplifier circuit;

a first wire connecting the first electrode to the first input terminal; and

a second wire having substantially an identical length as the first wire and laid substantially parallel thereto, the second wire connecting the second electrode to the second input terminal,

wherein identical bias voltages are applied to the first and second input terminals,

a distance between the first electrode and the first input terminal and a distance between the second electrode and the second input terminal are substantially identical, and

a distance between the first and second electrodes and a distance between the first and second input terminals are substantially identical.

12. (New) A photosensor-amplifier device as claimed in claim 11,

wherein the photoelectric conversion circuit is a photodiode formed, on a semiconductor substrate of one conductivity type, by joining a semiconductor of another conductivity type and coating a top surface with an insulating film;

the first electrode is formed by removing a part of the insulating film so that the first electrode is made contact with the semiconductor of another conductivity type; and

the second electrode is formed on the insulating film and is electrically open.

13. (New) A photosensor-amplifier device as claimed in claim 11,

wherein the first chip includes a first region formed, in a top portion of a semiconductor substrate of one conductivity type, by joining a semiconductor of another conductivity type; a second region, sufficiently smaller than the first region, formed in the top portion of the identical semiconductor substrate by joining the semiconductor of another conductivity type; and an insulating film coating a top surface of the first chip,

a photodiode is formed by removing a part of the insulating film that coats the first region and by forming the first electrode so as to be made contact with the first region,

a dummy photodiode shielded from light is formed by removing a part of the insulating film that coats the second region and by forming the second electrode in such a way that the second electrode is made contact with the second region through the removed part of the insulating film and that the second electrode covers all of a top portion of the second region.

14. (New) A photosensor-amplifier device as claimed in claim 11, further comprising:

a substrate, having a first conductor pattern and a second conductor pattern formed thereon, for mounting the first chip and the second chip thereon,

wherein the first wire connects the first electrode to the first input terminal by way of the first conductor pattern and the second wire connects the second electrode to the second input terminal by way of the second electrode pattern.

15. (New) A photosensor-amplifier device as claimed in claim14,